



The presentation will begin shortly. There will be no audio until then.

DESIGNING EFFECTIVE SURVEY QUESTIONS

Jesse Tran

Program Evaluator

Overview

- Where do I really start? – Questions to ask yourself before you begin
- Which question to use? – Different question types and what kind of data they can capture
- Designing the question – The art of framing questions and avoiding common pitfalls
- Activity – Apply your knowledge in a series of fun and interactive scenarios

Where do I start?

- What do you want to know?
- How do you intend to use the data?
 - What is the purpose of collecting the information?
 - Who will use the information?
- Who is your audience?
 - Who is going to participate?
- How are you going to analyze your data?
 - Statistics
 - Descriptive
 - Parametric
 - Non-parametric

Question Types

- Multiple choice
- Rank order
- Rating scale
- Open-ended

Multiple Choice

- Questions with two or more answer options. Useful for all types of feedback, including collecting demographic information. Answers can be "yes/no" or a choice of multiple answers. Beware of leaving out an answer option, or using answer options that are not mutually exclusive.

Multiple Choice Example

Which type of cancer do you fear getting the most?

- a. Lung
- b. Pancreas
- c. Skin
- d. Funny bone

Rank Order

- Questions that require the ranking of potential answer choices by a specific characteristic. These questions can provide insight into how important something is to a customer. Best in online or paper surveys, but doesn't work too well in phone surveys.

Rank Order Example

Please rank the following cancer screening tests from 1-5 in order of most to least preferable:

(1 = most preferable, 5 = least preferable)

- ___ Colonoscopy
- ___ Flexible sigmoidoscopy
- ___ Fecal immunochemical test
- ___ Double contrast barium enema
- ___ Magic 8-Ball

Rating Scale

- Questions that use a rating scale for responses (Likert-type). This type of question is useful for determining the prevalence of an attitude, opinion, knowledge or behavior.

Rating Scale Example

Please rate the degree to which you agree with the following statements:	Strongly disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
8. I am worried that colorectal screening tests such as a colonoscopy may be painful.	1	2	3	4	5	6
9. I am worried that the preparation and/or testing for colorectal cancer may be embarrassing.	1	2	3	4	5	6
10. I am worried that the preparation and/or testing for colorectal cancer may be inconvenient.	1	2	3	4	5	6
11. I am worried about finding out that I may have cancer.	1	2	3	4	5	6
12. I am aware of the risk factors that may contribute to developing colorectal cancer.	1	2	3	4	5	6
13. I am aware of the screening tests available for colorectal cancer.	1	2	3	4	5	6
14. I am aware of the benefits of early detection of colorectal cancer.	1	2	3	4	5	6
15. The amount of my coinsurance and/or deductible is a barrier to me getting screened for colorectal cancer.	1	2	3	4	5	6
16. The time I must be away from work is a barrier to me getting screened for colorectal cancer.	1	2	3	4	5	6
17. The cost of travel to get screened for colorectal cancer is a barrier for me.	1	2	3	4	5	6

Open-Ended

- Questions where there are no specified answer choices. These are particularly helpful for collecting feedback from your participants about their attitudes or opinions. However, these questions may require extra time or can be challenging to answer, so participants may skip the questions or abandon the survey. In addition, the analysis of open-ended questions can be difficult to automate, and may require extra time or resources to review.

Open-Ended Example

Please describe your most memorable webinar experience:

Wording Your Questions

- Be direct, clear, concise, and unambiguous
- Avoid “depends” questions
- Create a clear and consistent interpretation

Question Design Pitfalls

- Not knowing your specific analytic objectives interferes with writing an appropriate question
- Using someone else's measures blindly
- Not pretesting

Structural Design Pitfalls

- Not including enough choices
 - **Example:** How many times in the past month have you visited our website? [0 1-2 3-4 5 or more]
 - Always include an option for "not applicable" or "don't know", since some people will not know or remember, and if they guess, their answer will skew the results.
- Not writing balanced scale choices

Content Design Pitfalls

- Putting two questions (or more) in the same question.
 - **Example:** How satisfied are you with the hours and location of our offices? [1=very dissatisfied, 5=very satisfied]
 - You won't be able to tell whether the participant is responding about the time, or the location, so you should ask this as two separate questions.
- Leading Respondents
 - **Example:** This agency was recently ranked as number one in customer satisfaction in the federal government. How satisfied are you with your experience today? [1=very dissatisfied, 5=very satisfied]
 - The first statement influences the response to the question by providing additional information that leads respondents to a positive response, so you should leave that text out.
- Assuming the respondent has specific content knowledge
 - **Example:** Did this class meet Part 46 annual refresher requirements? [Yes No]
 - The question assumes everyone knows Part 46 requirements. The question should be broken into two parts so that only those who know Part 46 will answer if it met the requirements.
- Using Technical Terms without definitions

ACTIVITY

Test your knowledge

Scenario 1

Amanda Hugginkis works for a local public health unit. Her main focus area is in the area of child vaccinations. She is concerned about the current anti-vaccination trend and recent outbreaks of vaccine preventable diseases. Amanda wants to better understand some of the perceptions and attitudes of people in her community about vaccination.

Question 1

Amanda wants to ask a question that will measure participants attitudes and opinions on the safety of vaccines. Which type of question do you think would best accomplish this?

- A. Multiple choice
- B. Rating scale
- C. Open ended
- D. Ranking

Question 2

Amanda wrote the following question:

How familiar are you with vaccines and their side effects?

A. Yes

B. No

In the chat box, type in what you think is wrong with this question.

Question 3

Amanda wants to understand how much the participants trust the local public health unit as a source of information on vaccines.

Which of the following would be the best way to structure the question:

A. Do you trust the local public health unit to give you accurate information about vaccines?

____ Yes ____ No

B. Please rate the degree to which you agree with the following statement:

I trust the local public health unit to provide accurate and trustworthy information about vaccines.

____(1)Strongly disagree ____ (2)Disagree ____ (3)Slightly disagree

____ (4)Slightly agree ____ (5)Agree ____ (6) Strongly agree

C. Rank the following sources of information on vaccines from 1-5 in order of trust. 1 = most trustworthy, 5 = least trustworthy

____ Local Public Health Unit

____ Wikipedia

____ WebMD

____ Andrew Wakefield

____ Dr. Quinn, Medicine Woman

Scenario 2

Dr. Bruce Banner MD, PhD is going to be offering a half-day workshop on survivorship for those undergoing radiation treatment. This workshop will be accredited and offer up to four hours of continuing education credits. Dr. Banner needs to evaluate the workshop to ensure participants are learning and that the information is applicable and useful to his audience.

Question 1

Dr. Banner wants to know what part of his workshop was most helpful to the participants. What type of question do you think would best capture this information?

- A. Multiple choice
- B. Ranking
- C. Rating scale
- D. Open-ended

Question 2

Dr. Banner wrote a question to see if the participants understood his discussion on emotional care for survivors.

Many survivors experience fear which may present as anger. Which of the following is an acceptable method of de-escalation?

- A. Acknowledge their feelings*
- B. Control your tone and body language*
- C. Beat it out of them*
- D. Be respectful and honest*

In the chat box, type in what you think is wrong with this question.

Scenario 3

Hans Christian Andersen has been running a program that promotes physical activity and nutrition to children and adolescents in his county. The continuation of his program requires that he performs an evaluation in order to secure continued grant funding. He would like to survey area schools regarding their implementation of program strategies and report the results to funders.

Question 1

Hans wants to understand the successes and challenges that participating facilities have had in implementing program components. Which of the following types of questions do you think would best capture this information?

- A. Multiple choice
- B. Rating scale
- C. Ranking
- D. Open-ended

Question 2

Which of the questions below would be best if Hans wanted to get a count of how many organizations were implementing each program strategy?

- A. Please describe the program strategies you have implemented at your facility.
- B. Of the strategies listed below, please check all that you have implemented at your facility.
 - ☐ Support quality PE classes in schools
 - ☐ Support workplace physical activity policies
 - ☐ Advocate for statewide healthy eating program
 - ☐ Promote access to healthy foods at worksites
- C. Please rank the following strategies in order of priority for your facility:
 - ☐ Support quality PE classes in schools
 - ☐ Support workplace physical activity policies
 - ☐ Advocate for statewide healthy eating program
 - ☐ Promote access to healthy foods at worksites

Question 3

Hans wanted to measure participant's attitudes toward nutrition guidelines. He wrote the following question:

I believe that the sodium guidelines for school lunches are too restrictive

- (1) *Strongly disagree*
- (2) *Slightly disagree*
- (3) *Neither agree or disagree*
- (4) *Slightly agree*
- (5) *Agree*
- (6) *Strongly agree*

In the chat box, please type what you think is wrong with this question.

Questions?



- For questions about today's topic please email Jesse Tran at jtran@nd.gov
- The post-test for 1.0 contact hours is available here or when the presentation closes you will be automatically directed to the webpage.

<http://www.ndhealth.gov/compcancer/event-2/>

For Credit:

- 1.0 Contact Hours from the North Dakota Board of Nursing will be provided to those who successfully complete the post-test and are eligible for contact hours.
- Certificates will be emailed to the address provided on the post-test form.

If you have any questions regarding credit for today's presentation please contact:

Janna Pastir

Comprehensive Cancer Control Program Coordinator

jlpastir@nd.gov

701.328.3046